

To Sir WALTER BLACKETT, Bart. Mayor,
the ALDERMEN, and COMMON COUNCIL
of Newcastle upon Tyne.

GENTLEMEN,

HAVING had the honour, with Mr Smeaton, in January last, to give you our conjoint opinions relative to *Tyne Bridge*, which has since been printed, and having since that time, at your request, taken a further inspection into and consideration upon that matter with Mr Mylne, I am now to offer you my sentiments on this Gentleman's Report, which has been presented to you by the Gentlemen of the Committees of *Gateshead* and the lower town of *Newcastle*.

There can be no need to take up your time with the acknowledgments of the obligations I have received from Mr Mylne on this, as well as on many former occasions, and my candid declaration of the satisfaction I should feel, if our endeavours should become serviceable to all parties interested in this important affair.

I find it will not be necessary for me to enter into a discussion of the various points laid down in the beginning of Mr Mylne's Report, as postulata, or definitions of the rights of the various parties who seem to be interested in this affair; many of them referring to a province I am little acquainted

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with, and shall therefore readily submit to the judgment of those who are more conversant therein.

The first thing, therefore, which I shall have occasion to speak to, is the conclusion which seems to be drawn from these postulates, of the necessity of placing the new Bridge in the scite of the old one, unless the impracticability of that measure be proved and acknowledged.

Men are subject to differ in their opinions, and might do so in this case as well as in others. I should then apprehend the necessary proof would depend upon the failure of an actual trial. The party, therefore, that undertook to make such proof, I believe, would find himself engaged, not only in a hazardous, but in a very costly experiment; and if questions of this nature were to be limited to such a decision only, many things, imperfect in almost every shape, would stand but a very small chance of ever receiving any amendment.

But to spend no more time about such decisions, I must beg leave to refer to the eighth page of the printed Report of Mr Smeaton and myself above-mentioned, where, in the case of building this Bridge in the old situation, *without the use of sterlings*, it is supposed not to be an impossibility in point of art



art to do it, provided that time and expence were unlimited. I acknowledge Mr *Mylne's* communication of the method he proposed to follow in that case, and after all, must own myself unable to limit or put down any definite number, for the few thousand pounds, which in Mr *Mylne's* Report, the expence of erecting such a Bridge there, might exceed what it would cost in a new situation.

In the next place, admitting the Bridge was erected in this situation; in order to procure a convenient avenue to the South end thereof, Mr *Mylne* proposes, that all the houses on the East side of *Battle Bank* from the *High Church Chair* downwards, and a few on the West side from *Pipewelgate* end upwards, should be purchased and pulled down, and that street or avenue be made forty feet wide, all the way from the Bridge up to *Half-moon Lane*. In this case whatever the street is raised at the bottom, must be deducted out of the present height of that hill, to obtain the future height of it; and supposing this raising of the street at the bottom not to exceed five or six feet, the total ascent up the *Battle Bank* would be only so much less than it is at present, and upon the whole, at a medium, would be one foot ascent in about eleven feet running, nearly the same as it now is, and few persons do

find, or I believe will think it a very easy ascent for carriages.

As the twenty-second postulatam seems to restrain the *Bishop of Durham* from giving his consent to erect a temporary Bridge on the stumps of his piers; I readily agree with Mr *Mylne* in the practicability of erecting it to the Westward of the present Bridge, and that it may join the fourth arch from the *Newcastle* shore on the North, and the bottom of *Battle Bank* on the South, and occasion no sort of hinderance to the future repairs, or to the erection of a permanent stone Bridge; but the time that may be spent in the execution depending upon many circumstances, renders it at present not quite easy to be ascertained.

Mr *Mylne* afterwards recommends to the attention of the Magistracy of *Newcastle*, the speedy removal of the dam formed by the ruins and rubbish of the fallen arches on the *Gatehead* shore, and this object had an equal recommendation from Mr *Smeaton* and myself, as may be seen towards the conclusion of the printed Report above-mentioned. This dam projects from the above shore into the river between one hundred and fifty and one hundred and sixty feet, and forces the latter part of the ebbing and the first part of the flowing water every tide, to quit its direct

rect course, and find a passage thro' some of the remaining arches on the *Newcastle* shore. The additional danger they become thereby exposed to, is readily allowed to be an evil, but a much greater is the shoal that is daily forming above and below this dam. A considerable portion of the river on that side, is thereby rendered stagnant water during the periods of time above-mentioned, and gives it the opportunity to deposit its sediment, which in a little time will produce a sand bank, projecting as far into the river as the dam above-mentioned, and perhaps as high as the high-water line of neap tides. Similar causes are well known to have been the origin of such effects; and should this ever be the case, the practicability or impracticability of ever being able to remove these ruins, independent of the article of expence, may become a subject of discussion of more serious importance to the interests of *Newcastle* and the navigation of the river *Tyne*, than any thing that can be proposed or agitated with regard to the situation of a permanent bridge.

It is unnecessary to describe the mischievous consequences that will necessarily follow the formation of such a sand bank. Every man that knows the situation will require no other assistant to point them out to him, than

than his own understanding. A power must be lodged somewhere that can compel the removal of this heap of rubbish, and I now repeat it to you again, that no time ought to be lost in procuring the exertion of this power with all possible dispatch.

The next article recommended to your consideration is the bad condition of the remaining part, or more properly the Corporation's part of the Bridge, and the representation it must be owned, throws no very favourable light upon it. But in order to come to particulars, I have now the honour to acquaint you, that specimens have been cut off the parts of the platforms and piles that appear under the fourth and fifth piers from the *Newcastle* shore, at sundry depths, from one one-half to six feet under the low-water line, that show no more visible signs of decay or dissolution of parts than oak timber may be expected to do, that had been immersed in water for a number of years within the period of a man's life. Nor do the solid courses of the masonry, resting upon these platforms up to the surface of the sterlings of those piers, seem to have undergone any material alteration for the worse; and from hence it is hoped, an inference maybe allowed, that the lower parts or stumps of the other piers of this bridge, may not be in a worse condition.

dition. The residue of the shafts of the piers up to the springing of the arches, and the arches themselves, appear to have received damages here and there, by blows, or from the bad connection and formation of some of the parts.

The articles now enumerated, are the most essential parts in the structure of every stone Bridge. The faces or points of the piers seem to have suffered most, but they will admit of repairs at any time when it may be found necessary, from the surface of the sterlings upwards, without exposing the rest to any danger, or the passenger to any inconvenience. Some of those points or faces of the piers, appear to have been a work posterior to that of the Bridge itself. It is also apparent, that from the smallness of the stones, and perhaps from the badness or deficiency of the mortar in some parts, this Bridge has never had the strength or stability, that might be given to such an edifice; and yet, with all these imperfections and disadvantages, and many others formerly enumerated, it has been kept on foot five hundred years.

Now an obligation resting on the corporation, to keep their share of this work in perpetual repairs, and their readiness to comply therewith in the best manner in their
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power, being acknowledged; I should be willing to hope, they will scarcely be exposed to the censures of posterity in so doing, when it is laid down as a maxim, or settled point, that the *Bishop of Durham* is not obliged to repair or reinstate his part of the Bridge, in any other manner, than that which it was in before the accident happened. And further, if a parallel may be taken from the common transactions of life, the candid part of mankind, I flatter myself, would allow me to think myself a little hardly dealt with, when the party with whom I stand equally engaged, either expected or pressed me to do more, than he was willing to comply with himself.

Some of the remaining articles in Mr *Mylne's* Report, relate to improvements proposed to be made in some of the narrow streets in the town of *Newcastle*. For my part, as I do not find these streets immediately connected with the Bridge, believe it foreign to the present purpose, to enter into any discussion about them.

I think I have now gone through the most essential parts of this Report necessary to be taken notice of. I submit the whole to your consideration, and have the honour to be,

GENTLEMEN,

Newcastle, Your most obedient humble servant,

March 17, 1772.

JOHN WOOLER.



